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AUTHOR Jacobson, Willard J. The First Meeting of the National Association for TITLE Research in Science Teaching: "NARST -- A Golden Anniversary." PUB DATE Mar 77 14p.: Paper presented at the annual meeting of the NOTE National Association for Research in Science Teaching (50th, Cincinnati, Ohio, March 22-24, 1977) EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage. DESCRIPTORS Educational Research; History; *National Organizations; Organizations (Groups); *Professional Associations; Professional Education; Science Education: *Science History *National Assn for Research in Science Teaching **IDENTIFIERS** ABSTRACT Presented is an historical summary of the founding and development of the National Association for Research in Science Teaching (NARST). Included are listings of NARST charter members and past presidents. (SL)

U.S DEPARTMENT OF HEALTH. EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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THE FIRST MEETING OF
THE NATIONAL ASSOCIATION FOR RESEARCH
IN SCIENCE TEACHING

Willard J. Jacobson Teachers College Columbia University

"NARST -- A GOLDEN ANNIVERSARY"

Wednesday March 23, 1977
The Netherland Hilton Hotel
Cincinnati, Ohlo

THE FIRST MEETING OF

THE NATIONAL ASSOCIATION FOR RESEARCH

IN SCIENCE TEACHING

The National Association for Research in Science Teaching has had fifty years of history. In this history, there are lofty aims and important accomplishments, exciting programs and lively discussions, long hours of committee work and important changes in policy, reports of significant research and illuminating analyses of research, penetrating criticisms and bruised egos, long nurtured friendships and much cooperative work, widespread influence upon science learning and instruction but not as much as we would like, survival of crises and the glow of good times — it is a long and fascinating history. It is a history that should be studied for there is much to be learned. For now, we consider the beginning — THE FIRST MEETING OF THE NATIONAL ASSOCIATION FOR RESEARCH IN SCIENCE TEACHING.

It was on a Monday, February 27, 1928 that sixteen science educators met in Cambridge, Massachusetts. 1 The meeting was arranged in conjunction with the convention of the Department of Superintendence of the National Education Association. William L. Eikenberry was elected the first president and S. Ralph Powers was elected secretary. Eikenberry was president for the first three years of the Organization's existence. Powers was to continue to be secretary of NARST for more than a decade. Elliot R. Downing, Harry A. Carpenter, and

Gerald S. Craig and others recall that the meeting took place at the Harvard Faculty Club. However, Hanor Webb, in his comments at the Silver Anniversary placed the meeting in the Colonial Club in Cambridge. Webb stated that he was kept from attending the meeting because, "the creeks were too high between Nashville and Boston."

Francis D. Curtis were also elected to the Executive Committee. Eikenberry presented a list of thirty-three individuals whose scholarly attainments, or potentialities, he deemed sufficiently distinguished to be considered for membership. They had already accepted Eikenberry's invitation to have their names presented for membership. It is reported that, at the first meeting, the people present first voted to accept all thirty-three as charter members and then changed their minds and narrowly voted that only the sixteen who were present at the Cambridge meeting should be considered charter members. At the meeting in 1930, the members changed their minds again and voted that all of the original thirty-three who had paid their dues should be considered charter members.

The sixteen science educators who gathered in Cambridge to form NARST were brought together by a letter from William Lewis Eikenberry. Eikenberry was educated at Mount Morris Academy and the University of Michigan, had held several teaching posts in the Middle West, and was now Professor and Head of the Science Department at Pennsylvania State Normal School in East Stroudsburg. He was certainly deeply involved in initiating professional organizations in science education. He had already organized a group of Pennsylvania science teachers. Later, he was to be an important figure in initiating the organization that was to become the Association for the Education of Teachers in Science (AETS). He was also among those who initiated the Middle State Science Teachers Association. He served as President of the Science Section of

²The list of charter members contains thirty-two names. There is no mention in the literature of who was invited and didn't pay his dues.

Olarence M. Pruitt, "William Lewis Eikenberry," Science Education, Vol. 40, No. 4 (October, 1956), pp. 259-261.

CHARTER MEMBERS OF THE NATIONAL ASSOCIATION FOR

RESEARCH IN SCIENCE TEACHING

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OTIS W. CALDWELL Teachers College New York City

HARRY A. CARPENTER
Dept. of Public Instruction
Rochester, New York

GERALD S. CRAIG Horace Mann School New York City

H.A. CUNNINGHAM State Normal School Kent, Ohio

FRANCIS D. CURTIS
University High High School
Ann Arbor, Mich.

E.R. DOWNING
School of Education
University of Chicago
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W.L. EIKENBERRY State Teachers College Trenton, N.J. W.CHARLES FINLEY State Teachers College Montclair, N.J.

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ELLSWORTH S. OBOURN
John Burroughs School
St. Louis Mo.

E. LAURENCE PALMER Cornell University Ithaca, N.Y.

ELLIS C. PERSING Cleveland School of Education Cleveland, Ohio CHARLES J. PIEPER
New York University
Washington Square
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S.R. POWERS Teachers College New York City

F.A. RIEDEL Teachers College Columbia University

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RALPH WATKINS University of Missouri Columbia, Missouri

H.A. WEBB George Peabody College for Teachers Nashville, Tenn.

W.G. WHITMAN State Normal School Salem, Mass.

E.E. WILDMAN
Office of the City
Superintendent of Schools
Philadelphia, Pa.

N.E.A. which was a precursor of the National Science Teachers Association (NSTA). Although we know that NARST resulted from discussions among a number of leading science educators, William L. Eikenberry was a prime figure initiating NARST and seeing it through its first years. He apparently chaired the first meeting, was elected president, and held the office for the first three years.

S. Ralph Powers⁵ served as secretary of NARST until 1937, as editor of Science Education, and as president in 1939. He was Professor and Head of the Department of Natural Sciences at Teachers College, Columbia University for many years. He was educated at Illinois Normal University, the University of Illinois and the University of Minnesota. He had taught in Indiana and at the Universities of Arkansas and Minnesota before coming to Teachers College in 1923. He was a very active researcher, prolific writer and gifted stimulator of students.

The other members of the original Executive Committee were Elliot R.

Downing, Harry A. Carpenter, and Francis D. Curtis. Elliot Downing was from the University of Chicago, contributed to nature study and elementary school science through such studies as "Children's Interest in Nature Materials," and to high school science through such studies as "Techniques for the Determination of Basic Principles in Science Courses." Downing became the second President of the Association and served for two terms. Harry A. Carpenter was with the Department of Public Instruction of the Rochester Public Schools. He con-

⁵Clarence M. Pruitt, "Samuel Ralph Powers," <u>Science Education</u>, Vol. 40, No. 5 (December, 1956), pp. 359-361.



⁴Eikenberry had a sophisticated view of the role of science teacher organizations. See his "Types of Useful Organizations of Science Teaching," <u>Science Education</u>, Vol. 18, No. 1 (February, 1934), pp./5-9.

"Success in Physics and Chemistry in Relation to General Science and Biology." Carpenter became the eleventh president of NARST in 1941. Francis Curtis⁶ was elected the fifth member of the Executive Committee. For twenty-six years, Curtis was a leader in science education at the University of Michigan. He contributed voluminously to the science education literature. He is perhaps best known for his three Digests of Investigations in the Teaching of Science. He became the third president of NARST in 1933.

William Eikenberry invited and who came? Even the most hasty perusal of the list of charter members elicits recognition of names that built the foundations of science education. Eikenberry, Cunningham, Finley, Glenn, Jean, Whitman and others were from state teachers colleges and normal schools. Carpenter, Hollinger, Thiels, Van Cleve, and Wildman were with boards of education.

Craig, Curtis, and Obourn were teachers in schools. Black, Caldwell, Downing, Palmer, Pieper, Watkins, Webb and others were associated with major universities engaged in science education research and teacher education. The list of charter members can and will be analyzed in many different ways. An analysis of the origins of the charter members may be of interest. Although the first and many of the subsequent meetings were held in the East, thirteen of twenty whose origins we have been able to trace came from the Midwest. Some have suggested that education provided a path of upward mobility for the ambitious young people from the farms and villages of rural America. If so, the charter members

Oclarence M. Pruitt, "Francis Day Curtis," <u>Science Education</u>, Vol. 41, No. 5 (December, 1957), pp. 371-374.

of NARST were among those who did "right well."

What were the early meetings like? The meetings were small. There were sixteen at the first meeting, but at other meetings there were no more than eight or nine. The organization was small, largely because there were few science educators and even fewer doing research. Several early members have mentioned the problem of travel in pre-airlines days. It was difficult for members from the West to attend meetings. However, those who attended found the meetings stimulating and richly rewarding. There were Sunday evening meetings when a speaker, often a member, made a presentation, which was followed by lively discussion. Long and enduring friendships were built. While there were often sharp differences of opinion and searching criticism of research, a bond of friendship was built between these early pioneers.

Many have followed in their footsteps. The list of Presidents of NARST includes leading science education researchers from institutions across the United States. They have nurtured the organization, planned meetings and represented the Association in a variety of ways. They have guided the Association through serious crises and have made possible important accomplishments. Each has imparted a bit of their unique style. Many have sensed the debt that they owe to those who founded NARST. All have tried to carry on the traditions and build the Association.

⁷In some of the early correspondence of these pioneers from the Midwest, it is suggested that they found education in the East in such a sorry state that it seemed necessary to organize to deal with some of these deficiencies.

⁸I am indebted to Gerald S. Craig for a taped description of some of the early meetings of NARST.

The Sixth Annual Meeting in 1933 was held in Minneapolis. NARST did not again hold a meeting west of the Mississippi until 1969 when it met in Pasadena.

PRESIDENTS OF NARST

| • | | . • | |
|---------------------|------|--------------------|--------------------|
| George C. Mallinson | 1954 | W.L. Eikenberry | 1928 |
| Kenneth C. Anderson | 1955 | W.L. Eikenberry | 1929 |
| W.C. Van Deventer | 1956 | W.L. Eikenberry | 1930 |
| Waldo W. Blanchet | 1957 | Elliot R. Downing | 1931 |
| Nathan S. Washton | 1958 | Elliot R. Downing | 1932 |
| Thomas P. Fraser | 1959 | Francis D. Curtis | 1933 |
| Vaden W. Miles | 1960 | Ralph K. Watkins | 1934 |
| Clarence H. Boeck | 1961 | Archer W. Hurd | 1935 |
| Herbert A. Smith | 1962 | Gerald S. Craig | 1936 |
| Ellsworth S. Obourn | 1963 | Walter G. Whitman | 1937 |
| Cyrus W. Barnes | 1964 | Hanor A. Webb | 1938 |
| Frederic B. Dutton | 1965 | Ralph Powers | 1939 |
| Milton O. Pella | 1966 | Otis W. Caldwell | 1940 |
| H. Craig Sipe | 1967 | Harry A. Carpenter | 1941 |
| John M. Mason | 1968 | G.P. Cahoon | 1942 |
| Joseph D. Novak | 1969 | Florence G. Billig | 1943 |
| Willard J. Jacobson | 1970 | Florence G. Billig | 1944 |
| Paul D. Hurd | 1971 | Florence G. Billig | 1945 |
| Frank X. Sutman | 1972 | C.L. Thiele | 1946 |
| J. David Lockard | 1973 | Earl R. Glenn | ;- 1947 |
| Wayne W. Welch | 1974 | Ira C. Davis | 1948 |
| - Robert E. Yager | 1975 | Joe Young West | 1949 |
| Ronald D. Anderson | 1976 | N. Eldred Bingham | 1950 |
| O. Roger Anderson | 1977 | Betty Lockwood | 1951 |
| Roger Olsted | 1978 | Betty Lockwood | 1952 |
| , | | J. Darrell Barnard | 1953 |

And what have been the ramifications of what started with a meeting of sixteen on that February day in 1928? In a brief summary, it is impossible to recount the many meetings, the special programs, the stimulations and analyses of research, and the manifold impacts upon our profession of science education, the broader field of education, and upon society. These sixteen initiated a unique organization; no other such research organization was founded in other curriculum areas. It may be that the originators of NARST brought with them into science education the general inclination to do research from their basic education in the sciences. If research was to be done, then there was a need for an organization through which they could communicate their research and their research findings. Any review of research in science education reported in the years that followed will reveal much research that we will now judge as trivial, but this will probably be the case in any field of systematic investigation. But, someone at \some time judged the problem to be important enough to devote time and energy to it, and no one knows how those who will follow us will judge these studies. The reviews will also reveal fascinating studies that can make the reader want to pursue that direction of research in a different time and under different circumstances. Most importantly, NARST has been the vehicle for the stimulation, communication and criticism of truly significant research. $^{10}\,$ Some of the studies that have been reported at NARST meetings and in its journals have been so imaginative and are so foundational that it is a foolhardy researcher who embarks on a serious investigation without consulting the literature built by members of

We should, perhaps, recall that the entire membership of NARST became involved in reviewing and digesting the investigations included in Curtis' Second and Third 'Digests."

NARST. "If one does not know the history of a subject, then he is not fully knowledgeable in it." Il

A highly influential contribution that was much enhanced by the organization was the sponsorship of journals in which science education research could be reported, reviewed, and criticized. The General Science Quarterly was already in existence in 1928, having been founded in 1916 with Walter G. Whitman as editor and publisher. It became the first official organ of NARST. 12 In 1929, the name of the journal was changed to its present title Science Education. Science Education was the official organ until 1963 when the Journal of Research in Science Teaching was inaugurated. NARST continues to sponsor the Journal of Research in Science Teaching, and this probably is the most important vehicle for the publication of research studies in science education. The first editors of NARST's sponsored publications were Charter Members of the Organization, and other members have carried on in their footsteps. It is well to reacognize these members who contributed so much in this grueling and time-consuming position.

Walter G. Whitman

Charles Pieper

3. Ralph Powers

Clarence M. Pruitt

- J. Stanley Marshall
- H. Craig Sipe

¹² For an overview of the history of the General Science Quarterly and its successor Science Education, see Milton O. Pella's "Sixty Years of Science Education," Science Education, Vol. 60, No. 4 (Oct.-Dec.), 1976.



¹¹ Milton O. Pella, "Sixty Years of Service Education," Science Education, Vol. 60, No. 4 (Oct.-Dec.), 1976, p. 433.

James T. Robinson

0: Roger Anderson

David P. Butts

At a celebration of the Fiftieth Anniversay of an Organization, it is appropriate to mention the special contributions of Clarence Pruitt. 13 Clarence Pruitt was a graduate student at the time of the founding of NARST. He joined NARST soon after its founding and became its editor in 1946. He also served as secretary-treasurer for many years. An entire generation of science educators came to recognize his bold, distinctive handwriting on envelopes which they knew carried the joyful news of acceptance of an article or occasionally the sad news of rejection. Most importantly, Clarence Pruitt had a sense of history, and we are indebted to him for much of what we know about the early days of NARST and some of its most distinguished members.

Perhaps, the greatest legacy of these pioneers who met on that February day in Cambridge were the students that they nurtured and the students of these students who continue to give leadership in science education. Many of the senior members of NARST, including many of the Presidents of the organization, were students of one or more of these Charter Members. These Charter Members helped guide the fledgling researchers through their first research study, painstakingly supervised the writing of the dissertation, introduced them into NARST when they presented their first paper, and gave the novice a modicum of protection as the paper was exposed to the searching criticism from other senior members. Now, we have students of these students doing research, presenting papers, and taking the leadership of the science education research

¹³ Ned E. Bingham, "Clarence M. Pruitt," Science Education, Vol. 52, No. 5 (December, 1968), pp. 419-420.



community. But, in all of us the influence of the Charter Members continues. It has been said that great teachers never die. They live and influence the future through students and students of students. Many of the Charter Members sensed this, and it must have been heartening to Eikenberry, Powers, Curtis, Carpenter, Downing, Craig, Pruitt and all the others who helped build our organization to sense that they left a legacy that continues. The future for NARST seems bright. It is bright, in part, because it is built on a foundation laid by the sixteen who met and formed our Association on the next to last day of February in 1928.